Complete Summary

TITLE

Cholesterol management for patients with cardiovascular conditions: percentage of patients who had a low-density lipoprotein cholesterol (LDL-C) screening performed and the percentage of patients who have a documented LDL-C level less than 130 mg/dL and less than 100 mg/dL.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Process

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of members 18 through 75 years of age who, from January 1 through November 1 of the year prior to the measurement year, were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG), or percutaneous transluminal coronary angioplasty (PTCA), or who had a diagnosis of ischemic vascular disease (IVD), who had each of the following during the measurement year:

- LDL-C screening performed
- LDL-C controlled (less than 130 mg/dL)
- LDL-C controlled (less than 100 mg/dL)

Note from the National Quality Measures Clearinghouse (NQMC): For this measure there is both Administrative and Hybrid Specifications. This NQMC measure summary is based on the Administrative

Specification. Refer to the original measure documentation for details pertaining to the Hybrid Specification.

RATIONALE

Total blood cholesterol is directly related to the development of coronary artery disease (CAD) and coronary heart disease (CHD), with most of the risk being associated with low-density lipoprotein cholesterol (LDL-C). LDL is the major cholesterol carrier in the blood. When LDL-C levels are high, cholesterol can build up within the walls of the arteries, causing atherosclerosis, the build-up of plaque. Hemorrhaging or clot formation can occur at the site of plaque build-up, blocking arteries and causing heart attack and stroke.

Reducing cholesterol in patients with known heart disease is critically important, as treatment can reduce morbidity (heart attack and stroke) and mortality by as much as 40%. The National Cholesterol Education Program (NCEP) has established guidelines for managing cholesterol levels in patients with heart disease. The guidelines established the need for close monitoring of LDL cholesterol in patients with coronary heart disease and set a target for LDL-C of less than or equal to 100 mg/dL for such patients.

Cholesterol screening and control depends on the combined efforts of patient, physician and health plan. Lifestyle factors and new medications offer tangible means for reducing cholesterol and the risk of heart disease.

PRIMARY CLINICAL COMPONENT

Coronary artery disease (CAD); coronary heart disease (CHD); acute myocardial infarction (AMI); coronary artery bypass graft (CABG); percutaneous transluminal coronary angioplasty (PTCA); low-density lipoprotein cholesterol (LDL-C); ischemic vascular disease (IVD); screening

DENOMINATOR DESCRIPTION

Members age 18 through 75 years who, from January 1 through November 1 of the year prior to the measurement year, were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG), or percutaneous transluminal coronary angioplasty (PTCA), or who had a diagnosis of ischemic vascular disease (IVD) (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

LDL-C Screening: A low-density lipoprotein cholesterol (LDL-C) test performed any time during the measurement year

LDL-C Level Less Than 130 mg/dL: A LDL-C level of less than 130 mg/dL any time during the measurement year

LDL-C Level Less Than 100 mg/dL: A LDL-C level of less than 100 mg/dL any time during the measure year

See the related "Numerator Inclusions/Exclusions" field in the Complete Summary.

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 through 75 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

The American Heart Association estimates that 102.3 million American adults have total blood cholesterol levels of 200 mg/dL and higher. Of that group, 41.2 million adults have levels of 240 mg/dL or higher. 12,600,000 people alive today have a history of heart attack, angina pectoris or both. The gender breakdown is 6,200,000 males and 6,400,000 females.

EVIDENCE FOR INCIDENCE/PREVALENCE

American Heart Association (AHA). 2002 heart and stroke statistical update. Dallas (TX): American Heart Association (AHA); 2001. 35 p.

ASSOCIATION WITH VULNERABLE POPULATIONS

The elderly population has greater rates of coronary heart disease (CHD) than other groups. Eighty-five percent of people who die of CHD are age 65 or older and the average age of a person having a first heart attack is 65.8 for men and 70.4 for women.

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

American Heart Association (AHA). 2002 heart and stroke statistical update. Dallas (TX): American Heart Association (AHA); 2001. 35 p.

BURDEN OF ILLNESS

Coronary heart disease (CHD) caused 529,659 deaths in the US in 1999, about 1 of every 5 deaths. CHD is the single largest killer of American males and females.

EVIDENCE FOR BURDEN OF ILLNESS

American Heart Association (AHA). 2002 heart and stroke statistical update. Dallas (TX): American Heart Association (AHA); 2001. 35 p.

UTILIZATION

Unspecified

COSTS

The American Heart Association estimates that in the United States, the total cost of cardiovascular diseases and stroke in the US in 2002 is $329.2 billion. This figure includes health expenditures and lost productivity resulting from morbidity and mortality.

EVIDENCE FOR COSTS

American Heart Association (AHA). 2002 heart and stroke statistical update. Dallas (TX): American Heart Association (AHA); 2001. 35 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Members age 18 through 75 years who, from January 1 through November 1 of the year prior to the measurement year, were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG), or percutaneous transluminal coronary angioplasty (PTCA), or who had a diagnosis of ischemic vascular disease (IVD) and who were continuously enrolled for the measurement year and the year prior to the measurement year with no more than one gap in enrollment of up to 45 days during each year of continuous enrollment (commercial, Medicare) or with not more than a one-month gap in coverage (Medicaid).

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Members age 18 through 75 years who, from January 1 through November 1 of the year prior to the measurement year, were discharged alive for acute myocardial infarction (AMI)*, coronary artery bypass graft (CABG)*, or percutaneous transluminal coronary angioplasty (PTCA)**, or who had a diagnosis of ischemic vascular disease (IVD)***.

*AMI and CABG cases should be from inpatient claims only.

**All cases of PTCA should be included regardless of setting (e.g., inpatient, outpatient, emergency room).

***At least one outpatient/nonacute inpatient or acute inpatient/emergency department (ED) visit with any diagnosis of IVD.

Refer to the original measure documentation for Current Procedure Terminology (CPT), International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), Diagnosis-Related Groups (DRGs) codes, and Universal Billing (UB) Revenue codes to identify AMI, PTCA, CABG, and IVD.

Exclusions

Unspecified

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

LDL-C Screening: A LDL-C test performed any time during the measurement year, as identified by claims/encounter or automated laboratory data. Refer to Table CMC-C in the original measure documentation for Current Procedure Terminology (CPT) codes and Logical Observation Identifiers Names and Codes (LOINC) to identify LDL-C screening.

LDL-C Level Less Than 130 mg/dL: A LDL-C level of less than 130 mg/dL any time during the measurement year, as identified by automated laboratory data.

LDL-C Level Less Than 100 mg/dL: A LDL-C level of less than 100 mg/dL any time during the measurement year, as identified by automated laboratory data.

Exclusions
Unspecified

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Laboratory data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid plans.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Cholesterol management for patients with cardiovascular conditions (CMC).

MEASURE COLLECTION

HEDIS® 2006: Health Plan Employer Data and Information Set

MEASURE SET NAME

Effectiveness of Care

DEVELOPER

National Committee for Quality Assurance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

1999 Jan

REVISION DATE

2005 Jan

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2004. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2003. 374 p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

MEASURE AVAILABILITY

The individual measure, "Cholesterol Management for Patients with Cardiovascular Conditions (CMC)," is published in "HEDIS 2006. Health Plan Employer Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on August 29, 2003. This NQMC summary was updated by ECRI on April 13, 2005 and again on September 29, 2005. The information was verified by the measure developer on December 2, 2005.

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